

ABSTRACT

A method and apparatus used for the application of plating/coating in a cathodic arc process to improve coating uniformity, deposition rates, quality, cost, packaging, arc triggering, target wear and other improvements is described in the patent. The process improvements utilize a cathode with external current switching to two or more electrical cathode contacts, employment of magnets on the backside of the cathode, a non-mechanical arc initiation trigger, patterned target surfaces, adjustable cathode insulation, current modulation, and new packaging schemes.